Decision Notice/Finding of No Significant Impact

Clarke Mountain Project

USDA Forest Service
Watauga Ranger District
Cherokee National Forest
Carter County, Tennessee

Decision and Reasons for the Decision

Background

The Watauga Ranger District has prepared an Environmental Assessment (EA) documenting the analysis of a No Action alternative and two action alternatives that would implement the Cherokee National Forest *Revised Land and Resource Management Plan* (RLRMP). The action alternatives evaluate utilizing commercial timber harvest to provide early successional wildlife habitat, improve forest health, and diversify age class distribution within the Clarke Mountain Project area. Connected and associated actions such as release of mast-producing trees from competition, daylighting a road maintained as a wildlife opening, providing water sources for wildlife, providing wildlife habitat structures, installing and maintaining a gate, maintenance of system roads, temporary road construction, decommissioning roads and controlling nonnative invasive species are also part of this analysis.

The EA (Purpose and Need pages 12 and 13) compares the existing condition of the Clarke Mountain Project area with the desired condition for Prescription 8.A.1. This comparison showed that the Goals and Objectives (EA pages 11 and 12) for this Prescription Area are not being fully realized:

- Field studies found there are no stands providing early successional habitat conditions in the project area. Many species of wildlife including Chestnut-sided warbler, Black bear, White-tail deer, Ruffed Grouse, and Wild turkey, utilize this habitat and their populations would decline as a result. There is a need to create early successional habitat.
- Mast-producing trees are being out-competed in previously regenerated stands. There is a need to release these trees from competition to ensure mast-producing species are a component of the mature stands.
- Wildlife forage opportunities are lacking or in need of maintenance in the project area. There is a need to maintain existing wildlife forage. Adequate watering holes for wildlife are lacking in the analysis area. Wildlife habitat structures are limited. Subsequently, there is a need to provide nest boxes and bat houses.
- Prior to proposed timber harvest activities, maintenance of approximately 6.8 miles of authorized road, and construction 1.1 miles of temporary road are needed to provide for the removal of forest products from areas harvest for timber.

- There are 2.0 miles of system roads in the area that are not needed for resource management and need to be decommissioned.

- Establishment of nonnative invasive species would displace native vegetation. There is a need to control these as they occur.

To move toward meeting the RLRMP Goals and Objectives for Prescription Area 8.A.1 in the Clarke Mountain Project area, the Forest Service proposed the following actions (EA pages 6 and 7) that are analyzed in the EA as Alternative B:

1. Provide early successional habitat on 250 acres in Prescription Area 8.A.1 utilizing commercial timber harvest by regenerating nine stands with the Shelterwood Method. There are 58 acres providing this habitat in the project area now. (Objective 8.A.1-1.01, Goal 19, Objective 19.01 and 19.02).

2. All stands in Items #1 would require site preparation and release treatments (Goal 10, Goal 18).

3. Encourage oak and other mast-producing species regeneration by reducing midstory competition on 208 acres in seven stands with herbicide. (Objective 18.02).

4. Daylight 0.9 miles of roads maintained as wildlife openings. (Goal 10, Goal 14, Objective 14.02).

5. Wildlife Habitat Improvement Activities including maintaining and replacing a gate, providing nesting and roosting boxes, providing water sources, and providing drumming logs. (Goal 10, Goal 14, Objective 14.02).

6. Approximately 7.0 miles of prehaul maintenance, and 1.1 miles of temporary road construction would be required in support of Item #1. (Goal 48).

7. Decommission 2.0 miles of authorized road. (Goal 49, Objective 49.01).

8. Control nonnative invasive species within all treatment areas, roads, and wildlife openings. (Goal 15 and Objective 15.02).

Decision

Based on the analysis and disclosures of effects contained in the EA, I have decided to select Alternative B. I believe this alternative:

- Addresses the Purpose and Need stated on pages 12 and 136 of the EA.
- Moves this area toward the Desired Condition of Prescription Area 8.A.1, as directed in the RLRMP.
- Addresses the issue for this project stated on page 16.

I have chosen Alternative B because:

- The creation of early successional habitat will benefit many wildlife species, both game and nongame (EA pages 51-62). With Alternative B, 10 percent of the suitable area will be in early successional habitat. This meets the RLRMP Objective 8.A.1-1.01 of between 4 to 10 percent in early successional forest.

- Alternative B diversifies the age class distribution, and improves overall forest health (EA pages 34 and 35). This addresses Objectives 18.02.

- Utilizing commercial timber harvest as the tool to create early successional habitat and diversify ages of stands is an economical method to accomplish these goals while also providing forest products to the local economy. This addresses Goal 19.

- Site preparation, mast tree plantings, release and midstory treatments will increase the incidence of mast trees in the area (EA page 34). This addresses Goal 10 and Objective 18.02.

- Wildlife habitat will be further enhanced by regenerating mast-producing trees, providing cover logs, amphibian ponds, and water sources. Installing nest boxes and bat houses will provide habitat and provide increased opportunities for viewing wildlife (EA pages 51-62, 69). This addresses Goals 10, 14, and 30, and Objective 14.02.

- Road maintenance will reduce erosion. This addresses Goals 1 and 3, and Management Area Direction 10-1.02.

- Unneeded roads will be decommissioned. This addresses Goal 49 and Objective 49.01.

- Nonnative invasive vegetation that is competing with native species is controlled (EA pages 54, 60, 64, and 69). This addresses Goal 15 and Objective15.02.

I have decided to drop Stands 19 and 23 in Compartment 323 from early successional habitat creation. Field surveys conducted by resource specialists on July 21 and December 12, 2011 and January 12, 2012 determined that these two stands will be identified as Old Growth patches. Dropping these two stands from commercial harvest reduces the acreage of early successional habitat created from 230 acres to 175 acres; however, the resulting 8% of the suitable area to be created in early successional habitat will still meet the RLRMP Objective 8.A.1-1.01 of between 4 to 10 percent in early successional forest.

Although dropped from commercial harvest, Stands 19 and 23 will receive herbicide treatments to reduce the density of red maple, striped maple, and rhododendron in the mid and understory. No red maple greater than 14 inches in diameter will be treated.

My decision is based on the effects disclosure in the EA, public input received throughout the planning process, and on a review of the record that shows a thorough review of relevant scientific information, a consideration of responsible opposing views, and the acknowledgment

of incomplete or unavailable information, scientific uncertainty, and risk. This is reflected in the 34 citations and references in the EA utilized during analysis, and consultations with resource specialists.

The specifics of Alternative B include:

1. Provide Early Successional Habitat for Wildlife

Early successional habitat would be created in the project area on 4% - 10% of the suitable acreage in the 8.A.1 prescription (2,918 acres are in this prescription, 2,306 acres are classified as suitable for commercial timber harvest; 10% = ~ 230 acres). Eight stands would be regenerated using commercial timber harvest through the shelterwood method, and one stand would include a three-acre group selection cut. All stands would require pre- and post-harvest site preparation and release treatments:

- Pre-harvest site preparation: Prior to harvest, midstory species would be controlled with an herbicide (Triclopyr and/or Imazapyr) to reduce post-harvest sprouting of overly-competitive species.
- Mast tree seedling plantings: Seedlings of mast-producing tree species would be planted, where needed in regenerated areas to augment natural reproduction.
- Post-harvest treatments: Two years after harvest, use the chainsaw slashdown method or herbicide treatments (Triclopyr and Imazapyr) to reduce overly-competitive sprouts. At about age 10, use chainsaws to provide for release of mast-producing trees.

Table 2A: Early Successional Habitat Proposed by Compartment and Stand

Compartment	Stand	Acres	Age	Forest Type
322	8	36	106	Chestnut oak - Scarlet oak
322	28	26	95	Northern red oak - White oak - Hickory
322	32	27	95	Yellow poplar - White oak - No. red oak
331	32*	3	69	Yellow poplar - White oak - No. red oak
332	27	19	80	Northern red oak - White oak - Hickory
333	22	24	80	Northern red oak - White oak - Hickory
333	23	40	76	Yellow poplar
Total acres		**175**		

* Compartment 331, Stand 32 totals 23 acres: the Clarke Mountain Project proposes to create three acres of early successional habitat in the stand. Stand 32 would be managed as an uneven-aged stand since additional group selection cuts are likely to be proposed in the future.

2. Encourage Oak And Other Mast-Producing Species

Stocking density of the mid and understory on approximately 208 acres (Table 2B) would be reduced by about 25% using herbicides (Triclopyr, Glyphosate and Imazapyr). The reduction in competition and increased sunlight would promote the development of mast-producing species.

Table 2B: Compartment and Stand for Mast-producing Treatments

Compartment	Stand	Acres	Age	Forest Type
322	20	40	95	Yellow poplar - White oak - No. red oak
322	21	22	95	Yellow poplar - White oak - No. red oak
322	34	28	109	Northern red oak - White oak - Hickory
322	40	22	105	Northern red oak - White oak - Hickory
323	18	17	114	Northern red oak - White oak - Hickory
332	6	33	70	Yellow poplar - White oak - No. red oak
333	5	46	98	Yellow poplar - White oak - No. red oak
Total acres		**208**		

3. Daylight a road maintained as a wildlife opening

An area 50 feet on either side of the centerline of Forest Road #53322 would be thinned; primarily by removing non-mast-bearing trees (Table 2C). This would increase forage production in this linear wildlife opening, and would create forest edge habitat.

Table 2C: Road to be Daylighted

Road #	Road	Miles
53322	Clarke Mountain	0.9
Total miles		**0.9**

4. Improve Wildlife Habitat

The following actions and anticipated year of implementation (e.g. Year 1) are proposed to improve habitat conditions for terrestrial wildlife (Table 2D):

- Gate – replace an existing gate (Year 1), and maintain the gate (Years 2 and 5).
- Boxes – place bat roost boxes and bird/small mammal nest boxes (Years 2-3).
- Water – construct waterholes, vernal ponds, or wetland (~ 1/8th acre) (Years 2-3).
- Logs – provide ruffed grouse drumming logs (Years 3-4).

Table 2D: Clarke Mountain Terrestrial Wildlife Activities

Location	Boxes (each)[1]	Water (feature)	Logs (each)[2]
River Ridge Road	20	2	25
Clarke Mountain East	2	1	5
Clarke Mountain West	6	2	15
Total	**28**	**5**	**45**

[1] *Two boxes per harvested stand* [2] *Five logs per harvested stand*

5. Maintain Existing Road and Construct Temporary Road

Approximately seven miles of existing road would be maintained (Table 2E), and 1.1 miles of temporary road constructed (Table 2F) to remove forest products in areas proposed for timber harvest. Landings, approximately one acre in size would be for timber product preparation and

storage. All landings would be located no closer than 150 feet from open roads, expect where it is physically unfeasible or ecologically undesirable. Temporary roads, skid trails, and landings would be closed after the timber sale, and reforested mechanically or by hand if natural regeneration does not occur.

Table 2E: Roads Proposed to be Maintained

Road #	Road Name	Miles	Action
53221	Ingram Branch Spur	0.9	Pre-haul Maintenance
53222	River Ridge Road	5.0	Pre-haul Maintenance
53312	Tiger Creek Trailhead	0.1	Pre-haul Maintenance
53322	Clarke Mountain	1.0	Pre-haul Maintenance
Total miles		**7.0**	

Table 2F: Proposed Temporary Roads (TR)

Temporary Road	Miles	Action
TR to Compartment 332/Stand 27	0.4	Construct / Close
TR to Compartment 333/Stand 5	0.6	Construct / Close
TR to Compartment 333/Stand 23	0.1	Construct / Close
Total miles	**1.1**	

6. Decommission

Approximately two miles of authorized road would be decommissioned (Table 2G).

Table 2G: Roads Proposed to be Decommissioned

Road #	Road Name	Miles
291A	Twin Springs (Old TN 143)	0.2
533010	Former George Creek	1.0
533301	Bridger Tract	*0.5
53322	Clarke Mountain	**0.3
Total miles		**2.0**

*0.5 miles of Road #533301 would remain authorized.
**1.0 miles of Road #53322 would remain authorized.

7. Control Non-Native Invasive Species (NNIS)

In addition to herbicide treatments proposed for the vegetation management areas (approx. 668 acres), NNIS would be spot treated along roads (approximately 4 acres/mile x 7 miles = 28 acres), and within the proposed linear wildlife opening (12 acres). NNIS would only be treated where necessary and appropriate (total treated area = approx. 708 acres). Infestations would be treated with herbicide(s) (Glyphosate, Triclopyr, or Imazapyr) using the foliar spray, hack-and-squirt, streamline, and/or cut-surface application methods. Manual pulling may also be used where infestations are small.

Design Criteria:

Design criteria, summarized below, and in the EA on pages 23, are part of this decision.

1. Use broad-based dips or water bars on all access ways on non-level slopes.
2. Use a hydrologist or wildlife biologist to assist in the location of ephemeral pools, springs and seeps.
3. Implement Tennessee Best Management Practices (BMPs) as a minimum to achieve soil and water quality objectives. When RLRMP Standards exceed BMPs, the standards shall take precedence over Tennessee BMPs.
4. Streamside management zones (riparian corridors and filter zones) will be established, as specified in the RLRMP.
5. Any new threatened, endangered, and/or sensitive species locations discovered within a project area may result in all actions being delayed or interrupted within the area. The appropriate district wildlife/fisheries biologist or botanist will be consulted to determine effects of the action on the species.
6. Mixing-water for herbicide use would be brought to the site by work crews and not obtained from streams or other bodies of water.
7. No herbicide would be applied within 30 feet of open water except for selective treatments that use herbicides labeled for aquatic use.
8. Off-road equipment will be cleaned of seeds, soil, vegetative matter and other debris that could hold NNIS seeds and/or propogules. Off-road equipment will be inspected by a Forest Service representative to prevent NNIS introduction or spread in the project areas.
9. Build the fewest skid trails, logging roads, and log landings as feasible.
10. Skid trails will be placed and rehabilitated in a way that limits the spread of existing non-native invasive species from roads, trails, or powerline corridors, into stand interiors. Skid trails and plow lines will be rehabilitated (re-contoured, seeded, etc) after they are no longer needed.
11. Any cultural resource sites found during implementation of the project would be reported immediately to a Forest Service Archaeologist and work will stop in the area.
12. Skid trails and temporary roads for the purpose of timber harvest will not be constructed for sustained distances over 200 feet in areas with slopes of 40% or greater ("steep area"). The 200-foot length can be exceeded however where the skid trail and/or temporary road is needed to traverse a steep area in order to access the remaining harvest unit(s). Trees within the traversed steep area will not be harvested, except where possible through cable winching to equipment placed outside the steep area.

Other Alternatives Evaluated

In addition to Alternative B, the EA analyzed the No-Action alternative (Alternative A) and the Modified Proposed Action alternative (Alternative C). Under the No-Action alternative, current management would have continued. The Modified Proposed Action alternative would have reduced the amount of early successional habitat created to 4% of the project area, the minimum for prescription area 8.A.1.

Other Alternatives Considered But Not Developed

An alternative that would have created early successional habitat with non-commercial means is beyond the scope of this project.

Public Involvement

The Clarke Mountain Project's proposed action was provided to the public and other agencies for comment during scoping: May 7th through June 7th, 2010. The proposed action was also provided in the *Greeneville Sun* during the scoping period. Of the 132 letters sent out to individuals, public and private agencies and organizations, and tribal governments, nine responses were received.

In addition, the proposal has been published in the Schedule Of Proposed Actions since July, 2008. All nine of the responses were during the scoping period. Using comments from the public and other agencies, the Interdisciplinary Team developed a list of issues to address.

Twenty-eight comments were derived from the nine responses. Fourteen comments fell into one or more of the following categories: 1) outside the scope of the proposed action; 2) already decided by law, regulation, Forest Plan, or other higher level decision; 3) not relevant to the decision to be made, 4) conjectural and not supported by scientific or factual evidence 5) general comment, suggestions, opinion, or position statement; 6) other agency or partners consultation, review, advice, recommendations, etc., and/or 7) all ready considered in the proposed action or is standard procedure. All 14 comments were considered non-significant issues.

The remaining 14 comments were specific to this project and four issues were developed from these comments. Of the four issues, none were considered a significant issue for this project.

One significant issue—the lack of early successional habitat within the project area—was internally derived by the Interdisciplinary Team (IDT). While the lack of early successional habitat in the project area was also acknowledged within 11 of the 14 comments noted above, the 11 comments were simply in support of the proposed creation of early successional habitat.

Content Analysis of the scoping comments, issue development, and determination of significant issues is in Appendix B of the Clarke Mountain EA. Original letters are located in the project file.

Finding of No Significant Impact

After considering the environmental effects described in the EA, I have determined that these actions will not have a significant effect on the quality of the human environment considering the context and intensity of impacts (40 CFR 1508.27). Thus, an environmental impact statement will not be prepared. I base my finding on the following:

1. My finding of no significant environmental effects is not biased by the beneficial effects of the action (see EA Chapter III).

2. Public health and safety are minimally affected by the proposed actions (see EA Chapter III).

3. There are no unique geographic characteristics affected by the planned activity (see EA Chapter III).

4. The effects on the quality of the human environment are not likely to be highly controversial (EA Chapter III).

5. We have considerable experience with the types of activities to be implemented. The effects analysis shows the effects are not uncertain, and do not involve unique or unknown risk (see EA Chapter III).

6. The action is not likely to establish a precedent for future actions that may be implemented to meet the goals of the RLRMP.

7. The cumulative impacts are not significant (see EA Chapter III).

8. The action will have no effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places, because potential earth disturbing activities avoid these areas (see EA page 74).

9. For the Endangered Species Act of 1973, as amended: 1) The action will have no effect for the Carolina Northern Flying Squirrel and Gray Bat; and 2) The action will have a may affect, not likely to adversely affect not adversely affect for the Indiana Bat (see BE, Clark Mountain EA, Appendix D).

   The U.S. Fish and Wildlife Service, in a letter dated September 3, 2010, concurred with the Determination of Effects in the Biological Evaluation for species listed under the Endangered Species Act, as amended. The letter of concurrence is located in the Clarke Mountain EA project file.

10. The action will not violate Federal, State, and local laws or requirements for the protection of the environment. The action is consistent with the Cherokee National Forest *Revised Land and Resource Management Plan* (See EA pages 11-13).

Findings Required by Other Laws and Regulations

The actions are consistent with the intent of the management goals, objectives, and standards described in the Revised Land and Resource Management Plan for the Cherokee National Forest. The project was designed in conformance with the Plan and incorporates appropriate guidelines and mitigation measures. The project is feasible and reasonable, and it results in applying management practices that meet the Plan's overall direction of protecting the environment while providing goods and services.

It is my finding that the actions of this decision comply with the requirements of the National Forest Management Act (NFMA) of 1976, NFMA implementing regulations in 36 Code of Federal Regulations (CFR) Section 219, the National Historic Preservation Act, the Endangered

Species Act, the National Environmental Policy Act (NEPA), and the Council on Environmental Quality Regulations.

All stands where harvesting activity is planned are located on lands suitable for timber management in Prescription Area 8.A.1. The shelterwood and clearcutting method of regeneration are identified as applicable vegetation management practices for the community types found in this analysis area (Table F-7, Page 397, Appendix F, RLRMP).

Optimality Statement

In Alternative B, the Shelterwood Regeneration Method was determined to be the optimum method of regeneration. This method is one of the three silvicultural methods evaluated in Appendix F of the RLRMP "used to create early successional habitat and provide a sustainable level of these habitat conditions to meet management prescription objectives for the CNF". The term "optimum method" means it must be the most favorable or conducive to reaching the specified goals of the RLRMP.

NFMA findings:

1. Soil, slope, or other watershed conditions will not be irreversibly damaged (16 U.S.C. 1604 (g)(3)(E));
2. There is assurance that the lands can be adequately restocked within five years after final regeneration harvest (16 U.S.C. 1604 (g)(3)(E));
3. Protection is provided for streams, streambanks, shorelines, lakes, wetlands, and other bodies of water from detrimental changes in water temperatures, blockages of water courses, and deposits of sediment where harvests are likely to seriously and adversely affect water conditions or fish habitat (16 U.S.C. 1604 (g)(3)(E));
4. The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber (16 U.S.C. 1604 (g)(3)(E));
5. For the Shelterwood Method, it is determined to be the optimum method; for other cutting methods it is determined to be appropriate and meets the objectives and requirements of the applicable land management plan (16 U.S.C. 1604 (g)(3)(F)(i));
6. The interdisciplinary review has been completed and the potential environmental, biological, aesthetic, engineering, and economic impacts on each advertised sale area have been assessed, as well as the consistency of the sale with the multiple use of the general area (16 U.S.C. 1604 (g)(3)(F)(ii));
7. Regeneration areas are shaped and blended to the extent practicable with the natural terrain (16 U.S.C. 1604 (g)(3)(F)(iii));
8. Regeneration areas conform to the maximum size limits for areas to be cut in one harvest operation as required by 16 U.S.C. 1604 (g)(3)(F)(iv)).

9. Timber harvest is carried out in a manner consistent with the protection of soil, watershed, fish, wildlife, recreation, and esthetic resources, and the regeneration of the timber resource (16 U.S.C. 1604 (g)(3)(F)(v)).
10. Under 16 U.S.C. 1604 (m) even-aged stands of trees scheduled for regeneration harvest generally have reached culmination of mean annual increment of growth, unless the purpose of the timber cutting is excepted in the land management plan (FSM 1921.17f).

Travel Analysis Plan (TAP):

> Forest Service Manual *FSM* 7712 states*:* Use travel analysis to inform decisions related to identification of the minimum road system needed for safe and efficient travel and for administration, utilization, and protection of NFS lands per 36 CFR 212.5(b)(1) and to inform decisions related to the designation of roads, trails, and areas for motor vehicle use per 36 CFR 212.51, provided that travel analysis is not required to inform decisions related to the designation of roads, trails, and areas for those administrative units and ranger districts that have issued a proposed action as of January 8, 2009.

A Project Level TAP was completed for this project, and is located in the Clarke Mountain EA project file. Recommended changes to the transportation system from the TAP were incorporated into the analysis.

Old Growth Guidance:

This project is in compliance with Old Growth Guidance in the RLRMP that is based upon the report of the Region 8 Old Growth Team entitled *Guidance for Conserving and Restoring Old-Growth Forest Communities on National Forest in the Southern Region 1997* (Forestry Report 62). Two stands in Compartment 323 (stands 19 and 23) were identified as Existing Old Growth. None of the stands in Compartments 322, 331, 332 and 333, and in Prescription Area 8.A.1 are designated nor were identified as Existing Old Growth.

Administrative Review or Appeal Opportunities

This decision is subject to appeal pursuant to 36 CFR 215.11. Appeals must meet content requirements of 36 CFR 215.14. A written Notice of Appeal, including attachments, must be postmarked or received within 45 days after the date the legal notice is published in the *Johnson City Press* (Johnson City, TN). The appeal shall be sent to Cherokee National Forest, ATTN: Appeals, 2800 Ocoee Street, Cleveland, TN 37312. Appeals may be faxed to (423) 339-8650. Hand delivered appeals must be received at 2800 N. Ocoee Street, Cleveland, TN within the normal business hours of 8:00 am to 4:30 pm. Appeals may also be mailed electronically: Appeals-southern-cherokee@fs.fed.us.

All time periods are computed using calendar days, including Saturdays, Sundays, and Federal holidays. However, when the time period expires on a Saturday, Sunday, or Federal holiday, the time is extended to the end of the next Federal working day (11:59 pm). The day after publication of the legal notice of the decision in the newspaper of record (§215.7) is the first day of the appeal-filing period. The publication date of the legal notice of the decision in the

newspaper of record is the exclusive means for calculating the time to file an appeal. Appellants should not rely on date or time information provided by any other source.

For additional information concerning appeals, contact Stephanie Medlin, Cherokee National Forest, 2800 Ocoee Street, Cleveland, TN, 37312, or by phone at (423) 476-9700.

For further information on this decision, contact Don Palmer, Watauga District Ranger, 4400 Unicoi Drive, Unicoi, TN 37692, or by telephone (423) 735-1500.

Implementation Date

If no appeal is received, implementation of this decision may occur on, but not before, five business days from the close of the appeal filing period. If an appeal is received, implementation may not occur for 15 business days following the date of appeal disposition. (36 CFR 215.9)

Contact

For additional information concerning this project, contact Jeff Chynoweth, Cherokee National Forest, 4900 Asheville Highway, Greeneville, TN 37743, or by telephone (423) 638-4109.

/s/ Don J. Palmer February 27, 2012

Don J. Palmer Date
District Ranger
Watauga Ranger District
Cherokee National Forest